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## PLANTS SLIGHT TRAINING, INNOVATIONS; KIEV INDUSTRIALISTS ENLIST AID OF INSTITUTES

TRAINING PROGRAM OBSOLETE, INEFFECTIVE -- Moscow, Pravda, 12 Apr 50

The prevailing method of training workers at the plants has a number of serious shortcomings. There is no unified program. The educational aids are obsolete in that they fail to reflect the latest achievements in technology and Stakhanovite innovation. There is a dearth of suitable textbooks and visual aids, such as short films illustrating production operations. Very often, instructors lack the necessary equipment and are forced to improvise.

There is an acute need to improve the quality of instructors by establishing minimum pedagogical standards.

The training of workers in the plants is the responsibility of the Ministry of Labor Reserves, which has organized a division of individual and brigade instruction. However, this division has given little evidence of tangible achievement to date. Some of its schemes seem to have little justification. For example, the training term for a number of specialties (electric welding, riveting, concrete mixing, etc.) is only 2 months. The theoretical part of the program is limited to 70-80 hours for riveters, electroplaters, and motor and electric-saw mechanics; it is only 50 hours in the case of welders and roofers. As a rule, the theoretical part does not exceed 100 hours even for skilled workers such as electricians, tinsmiths, lathe operators, and electriccrane, compressor, and excavator operators.

It is time to cleate an interdepartmental center within the Ministry of Labor Reserves for the coordination of questions concerning the training and improvement of personnel in all enterprises. -- Budrin, chief of Personnel Training Division of the Moscow Machine-Building Plant

NEW INVENTION HAS DIFFICULTY GETTING INTO PRODUCTION -- Leningradskaya Pravda, 10 Jun 50

Not long ago, a pattern maker at the Elektroinstrument Plant proposed the production of a universal electric power tool which he had designed. With the addition of various attachments, the tool can plane, saw, sharpen, drill, or grind, as desired.

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Neither the plant office of rationalization and invention, nor the chief engineer, Krutov, gave him any support in his project. Chief Engineer Nikol'skiy, of the Main Administration for Construction Tools, told the pattern maker that the machine would be too complex and labor-consuming for production adding that it was not called for in the Main Administration's range of products.

Finally, however, the machine came to the attention of the ministry, and the Elektroinstrument Plant was ordered to make some experimental models of it, and to prepare for their series production.

Once again, unfortunately, indifference has set in, and the order of the ministry is being put into effect only very slowly.

SCORE PLANT DELIQUENT IN HIGH SPEED TECHNOLOGY -- Tashkent, Pravda Vostoka, 28 Jul 50

The Tashkent Excavator Plant is lagging unpardonably in the introduction of high-speed metal-cutting technology. The successes achieved in this field by a machinist who has worked out a high-speed method in turning out steel shafts have not even been applied in his own shop, let alone other parts of the plant.

Six months ago, Benkenshtat, director of the plant, ordered the creation of a school for teaching high-speed methods, but this school exists only on paper.

The Ministry of Construction- and Road-Machine Building has ordered the plant to convert 36 metal-cutting machine tools to high-speed methods, but it is extremely doubtful that this modest program will be carried out. Gorbatov, the chief technician, says that it cannot be done, "as there are not suitable machine tools for the job in the plant."

This is not true. The plant has the most modern equipment, and could more than comply with the ministry's order. One section has modernized two turret lathes and three thread cutters, but they are not yet being properly utilized. The plant has a vertical turning lathe, a boring lathe, and a vertical milling machine, but Chief Engineer Kozhevnikov and Chief Technician Gorbatov consider them incapable of being utilized in high-speed methods.

It is entirely possible to apply high-speed methods of cutting extensively in the plant. But instruction must be instituted and planning improved.

Parts must be produced by the group. The repair shop should be relieved of its present jobs of manufacturing excavator parts and assembly operations. It should devote its efforts entirely to modernization and repair of equipment.

COMMISSION FAILS TO FOLLOW UP RECOMMENDATIONS -- Moscow, Trud, 15 Aug 50

A year and a half ago, the Ministry of Heavy Machine Building created a permanent commission to study and disseminate Stakhanovite work methods and innovations. This commission comprises specialists from the scientific-research institutes, workers of the main administrations, representatives of the plants and central trade-union committees. The commission functions as an independent section of the scientific-technical council of the ministry, according to a plan approved by the ministry.

The plants submit so-called "cards of Stakhanovite achievement" to the commission. The production indexes and work methods of the Stakhanovite are indicated on each card. The engineers, together with the plant trade-union committees, make

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up the cards. The commission distributes memoranda to the plants on how to prepare these cards, as well as outlines on techniques and systems of production.

Members of the commission study suggestions which come in to them, and then review them at the regular sessions. Innovations approved for practical application are sent to the Orgtyazhmash Institute where they are scientifically analyzed, and the enterprises notified of their appraisal. Workers of the commission visit the plants so that they may study new methods and devices on the spot, and select the best of them. This practice has been carried out in the Uralmash Plant, the Khar'kov Turbogenerator Plant imeni Kirov, the Leningrad Metal Plant imeni Stalin, to name a few.

At the Elektrostal' Novo-Kramatorskiy Plant, a representative of the commission found that a gage maker had proposed using an autachment of new design for the repair of micrometers. Use of this device constituted a radical change in the method of measuring micrometer parts, making it possible to repair them in one-half the time formerly required. The commission recommended the use of this device to all plants.

In one plant, the commission was impressed by the achievements of two machinists in gear cutting. It reported to the ministry, which ordered the Orgtyazhmash Institute to work out new norms for rough gear cutting and high-speed thread cutting. Other plants were then informed of the measures taken.

Plans of a new mill, designed by a technician at the Novo-Kramatorsk Plant imeni Stalin, were sent to other plants by the commission, while at the same time it arforded instruction in the use of the mill.

The more important questions are brought up before the collegium of the ministry. At one such session over 300 Stakhanovites, technicians, designers, and workers of the institutes and main administrations participated. Their suggestions were incorporated into the 1950-53 plan for raising the productivity of labor.

Not long ago, a conference of drill operators, vertical boring- and turning-machine operators, and mill operators was called by the ministry on the initiative of the commission. The conference considered methods of more extensive utilization of equipment, and proposed, among other things, that some drilling operations be transferred to lathes. Several Stakhanovites were ordered to plants, where they demonstrated their methods at the machine tools, and held discussions in Stakhanovite schools.

Since its founding, the commission has considered 167 Stakhanovite efforts, and has given scientific validity to 36 valuable proposals and recommended their compulsory introduction into production operations.

Unfortunately, the commission has its defects, in spite of the important work it has done. In particular, it has not been purposeful enough in following up its recommendations to insure that they are put into practice at the plants. Some examples will illustrate this point.

A worker of the Soyzprommekhanizatsiya Trust invented a twin-flame oxyacetylene cutter. Of simple design, it increased the productivity of labor 180 percent. The commission recommended its wide application and utilization. However, the commission was content with simply sending the plants a detailed description and plans of the new machine. How and where was the new cutter introduced into production? What technical and economic effect have the plants derived from its application? The commission cannot answer these questions.

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The first mixed brigade was formed in the Khar'kov Turbogenerator Plant imeni Kirov. The commission sent material regarding the work of the brigade, which succeeded in cutting production cycles, to various enterprises. This material also contained plans of tools, schedules of high-speed machining, etc. But whether or not other similar brigades were made up in other enterprises, and what results their activity had, are unknown to the commission.

A forge worker of the Leningrad Plant imeni Stalin developed an improved technology for forging parts. He increased the output 200-375 percent above the norm. He replaced forging with hot stamping, and reduced tolerances. As a result, this Stakhanovite was saving 6 kilograms of metal on each forging. The commission studied his work method and informed the plants of it. But the directors of many enterprises prefer to work the old way, losing thousands of tons of metals in chips.

How can this sort of thing take place? Because neither the commission nor the ministry demand that the plants incorporate approved Stakhanovite methods into their technological processes. There was not one case in which the commission went to the scene to determine how the Stakhanovite proposals were being put into effect.

It is the primary task of the commission to work out a truly creative union with the plant managements, to help them put the Stakhanovite propositions into practice without delay. The commission should follow up the innovations which it recommends for application, and should demand an accounting from those who do not comply.

Another weakness of the commission is its exclusiveness. It does not exchange its experience with other ministries who are struggling with problems that the commission may have already solved.

One of the causes of weakness in dissemination of Stakhanovite methods is the absence of strong ties between scientific-research establishments of the ministry and the individual plants. The Orgtyazhmash Institute, the TSNITTMASh (Central Scientific Research Institute of Heavy Machine Building), and the research laboratories of the plants have been going their separate ways.

Scientific-research institutes should set up organs in the plants to check the practical results of their research. The Orgtyazbmash Institute should give serious thought to setting up its own bases for the manufactures of models of Stakhanovite tools and devices, where they could be thoroughly studied and tested.

Furthermore development of Stakhanovite methods of work depends to a great degree on the attentiveness and regularity with which the commission can aid the plant and trade-union committees. For their part, the trade-union committees should exercise prompt review of each innovation, and should activley participate in the development of plans for the utilization of Stakhanovite experience. The trade unions must also help to provide technical aid for Stakhanovites.

INSTITUTE HELPS PLANT DOUBLE PRODUCTION -- Moscow, Pravdu, 17 Aug 50

Several months ago the Kiev Machine-Building Plant had the problem of doubling the volume of its production while maintaining the same production area, the same production equipment, and the same number of workers.

The plant management and party organization joined forces in attacking the problem, and held a scientific-technical conference, with the Kiev Polytechnical Institute participating. During the conference, highly qualified specialists carefully studied the capacity of the plant, and the volume of its

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reserves. Ostaf'yev, the plant's director; the Deputy Director of the Polytechnical Institute; and Khrenov, a member of the Academy of Sciences Ukrainian SSR, reported the findings. A detailed plan was worked out, incorporating high-speed metal-cutting methods, new casting techniques, wide application of electric welding, and over-all mechanization. As a result, the plant was able to successfully solve the problem of doubling its production, and to fulfill the program of the postwar Five-Year Plan ahead of time. Now, every fourth man is credited with an invention or approved suggestion, and the plant should realize a yearly saving of  $1\frac{1}{2}$  million rubles.

The example of this Kiev plant is one of many. Now the majority of scientific-research establishments and higher educational institutions of Kiev have contacts with industrial enterprises, aiding them in solving their problems, and fostering the advancement of their technology.

On the initiative of the party organization of the Polytechnical Institute, individual scientific workers are working in the plants with individual innovators of plants and factories. The Krasnyy Ekskavator Flant and the Plant imeni Gor'kiy are among these enjoying such direct individual contact.

The example of the Electric-Welding Institute, under the direction of Academician E. O. Pator, is an outstanding one. It has direct links with 300 enterprises of the republic. In all its research work, the institute draws heavily on the practical experience of the plants.

In spite of the success noted in the collaboration of science and industry, results would be far more satisfactory if the city party committee exerted stronger influence on those scientific establishments which are not exerting themselves in aid of industry, and on the directors of some enterprises, who are not giving proper support to innovators and the efforts of scientists.

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